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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,207	08/27/2003	Robert Beach	A35064	5130

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FAY KAPLUN & MARCIN, LLP
150 BROADWAY, SUITE 702
NEW YORK, NY 10038

EXAMINER	
GREY, CHRISTOPHER P	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/649,207	BEACH, ROBERT	
	Examiner	Art Unit	
	Christopher P. Grey	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Awater et al. (Us 20010010689), hereinafter referred to as Awater.

Claim 1 Awater discloses providing said mobile unit with a data communications device **(fig 2, 100)**, said device including an interface **(fig 2, 200 or fig 6, radio interfaces)** to a host processor of said mobile unit **(fig 6, CPU)**, a data communications digital processor **(fig 6, 622)**, including a control program **(fig 6, 622 runs firmware para 0096)** and a radio transmitter and receiver **(fig 2, transceiver)**.

Awater discloses operating said data communications device in a first WLAN mode **(para 0055 lines 6-8)** to associate with said access point and engage in data communications with said network via an access point **(PARA 0004, 802.11 standard focuses on AP based networks)** using said radio transmitter and receiver **(fig 2, 200 and para 0057, element 200 transmits and receives packets)**.

Awater discloses operating said data communications device in a second personal area communications mode **(para 0055, lines 8-10)**, wherein said data communications device

communicates with at least one peripheral device **(para 0008, line 12, peripheral interface)** using said radio transmitter and receiver **(fig 2, 200 and para 0057, element 200 transmits and receives packets).**

Claim 5 Awater discloses wherein said control program is arranged to operate said data communcuations device in said first and second modes **(para 0053).**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-4, 6, 8, 9, 14-18, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689)

Claim 2 Awater discloses wherein said data communications device operating in said first WLAN mode uses a first communications protocol and said data communications device operating in said second personal area communications mode communicated with said at least one peripheral device using a second protocol **(see fig 1, using an IEEE 802.11 protocol for communication and a Bluetooth protocol for another form of communication).**

Awater does not specifically disclose the second protocol being a modification of the first protocol.

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the second protocol being used within Awater's invention, Bluetooth, is comparable and may be made equivalent to a modification of the 802.11 protocol, as both protocols aim for wireless communication with a destination device, so thus have the same goal but modified ways of implementing their goals.

Claim 3, 6 Awater discloses communication with a peripheral device as disclosed in the rejection of claim 1. Furthermore, the communication device depicted in fig 2, element 100, is equivalent to a master device, as it switches its communication modes, allowing bluetooth communication with the peripheral device, and allowing the communication in a hold state, park state, idle state and connected state.

Awater does not specifically disclose permanently associating with at least one peripheral device.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

Furthermore, it would have been obvious to one of the ordinary skill in the art at the time of the invention pertaining to claim 6, that re-association occurs when the two device come back into proximity of one another.

Claim 4, 16, 17 Awater does not specifically disclose said data communications device in said second mode including operating said radio transmitter at a selected power level lower than a power level used for operating in said first data communication mode.

Awater discloses switching (selecting) from a 802.11 mode to a bluetooth mode as disclosed within the rejection of claim 1, where it would have been obvious to one of the ordinary skill in the art that bluetooth is a standard and communcation protocol primarily designed for low power consumption. Therefore the second communication mode (bluetooth), when selected for communication would be dedicated for operating at a lower power.

Claim 8 Awater discloses at least one access point connected to at least one computer for providing wireless data communications between said at least one computer and at least one mobile unit **(para 0007, 802.11 MAC, such as that shown in fig 2 is connected to an AP and communication takes place between STA and AP)**, said access point using a first data communication protocol to receive association requests from mobile units and to form one or more associations with mobile units for data communications therewith **(para 0007, 802.11 communciation protocol is being utilized for communication between STA and AP)**.

Awater discloses at least one mobile unit including a host processor **(fig 6, CPU)** and a first data communications device **(fig 2, 100)**, said first data communications device including a first data communications digital processor **(fig 6, 622)** having a first control program **(fig 6, 622 runs firmware para 0096)** and a first radio for sending and receiving data **(fig 2, transceiver).**

Awater discloses at least one peripheral device **(para 0008, line 12, peripheral interface).**

Awater discloses wherein said first control program is arranged to send association requests to access points using said first radio and to provide data communications to and from said computer via at least one access point connected thereto **(para 0007, probe request frames allow STA to scan for AP).**

Awater discloses wherein said first control program communicates directly with said at least on peripheral device **(para 0008, bluetooth technology allows a station to connect to a peripheral device and interface; connects one device to another with one universal short range link, directly).**

Awater does not specifically disclose the peripheral device including a second data communications device, said second data communications device including a second data communications digital processor having a second control program and a second radio.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that in order for a peripheral device to communicate with the communication device as disclosed in fig 2, 100, it must have a processor, software and a transceiver of some sort for operation. Furthermore, the configuration of fig 2 may be that of a peripheral device such as the PDA disclosed in para 0053.

Claim 9 Awater discloses wherein said access point acts as a master device and permanently associated with said at least one peripheral device **(para 0007, beacon messages sent by AP to STA, where the beacon messages would indicate some form of master control from the AP; furthermore, the AP is well known in the art to act as a master device).**

Claim 14 Awater discloses said second control program including a network communcaition program **(fig 2 may represent a peripheral device with 102 representing the program)** to cause said at least one peripheral device to become associated with an access point **(para 0003, where the 802.11 funtion of the device will communicate with an AP)** connected to a network including said at least one computer **(fig 6, CPU)** and to engage in data communications using said first communications protocol **(fig 6, IEEE 802.11 protocol).**

Claim 15 Awater discloses said first control program being arranged to cause said first data communications device to communicate directly to said peripheral device when said first communications device is in direct communication with said second communcuation device and to communicate with said second communcuation device via said network when said first communucaitons device is no in direct communcuation with said second communcuation device **(para 0054, where a sniffer is provided for determining if a device operating using bluetooth is available –in direct communication—or if a device is functioning in IEEE 802.11 –not in direct communication--).**

Claim 21 Awater discloses a peripheral device **(fig 2 may represent a peripheral device with 102 representing the program)** including a data communcuations device **(fig 2, 100)**, said data communications device including a data communications digital processor **(fig 6, 622)** having a control program **(fig 6, 622 runs firmware para 0096)** and a radio **(fig 2, transceiver)**,

Awater does not specifically disclose wherein said control program is arranged to cause said data communications device to permanently associate with a data communications device on a mobile unit and conduct communications therewith.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

Claim 25 Awater discloses operating said data communications device in a first WLAN mode **(para 0055 lines 6-8)** to associate with said access point and engage in data

communications with said network via an access point **(PARA 0004, 802.11 standard focuses on AP based networks).**

3. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689) in view of Neufeld (US 6628675)

Claim 7 Awater discloses said communcation device including a power saving operational mode (para 0059, switching off transmitter equivalent to power savings) wherein said device is inactive for selected periods of time (inactive periods of time are when the transmitter is switched off)

Awater does not specifically disclose wherein said control program includes instructions to cause said data communications device to synchronize said selected periods of time with said peripheral device.

Neufeld discloses wherein said control program includes instructions to cause said data communications device to synchronize said selected periods of time with said peripheral device **(fig 4 depicts, after an inactive period of time has been experienced, synchronization takes place in a remote unit using a delayed finger).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the communication device as disclosed by Awater may be modified so as to perform synchronization after a period of inactivity has occurred. The motivation for this modification is for the obvious sync of these two communicating devices.

4. Claims 10-13, 18, 19, 20, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (Us 20010010689) in view of Famolari (US 20030110484).

Claim 10 Awater does not specifically disclose said first control program including an initiating program whereby said first data communication device receives initiation requests from said second data communications device and forming a permanent association therewith.

Famolari discloses an initiating program whereby said first data communication device receives initiation requests from said second data communications device **(see abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communcation as disclosed by Famolari within the functions of bluetooth control device. The motivation for this combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

Claim 11, 19, 22 Awater discloses reassociating two devices, wherein a device may go from a park or idle mode to an active mode (see rejection of claim 6).

Awater does not specifically disclose the first communcation device receiving reassociation requests from said peripheral device permanently associated therewith, and whereby the first communucaiton device thereafter engages in data communcuations with said at least one peripheral device.

Famolari discloses the first communcation device receiving reassociation requests from said peripheral device permanently associated therewith, and whereby the first communucaiton device thereafter engages in data communcuations with said at least one peripheral device **(see abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communcation as disclosed by Famolari within the functions of bluetooth control device. The motivation for this combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

Claim 12, 13, 20, 23 The combined teachings of Awater and Famolari disclose a reassociation program using requests as disclosed in the rejection of claim 11 and 22. Furthermore, it would have been obvious to one of the ordinary skill in the art at the time of the invention that on power up of any device performing communcation with another device, that some form of reassociation is necessary on power up, where the use of bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity and furthermore, reassociation when the come within a proximity for a second time.

Claim 18 Awater discloses a mobile unit including a host processor **(fig 6, CPU)** and a data communcaitions device, said data communcaiutions device **(fig 2, 100)** including a data communucaitons digital processor **(fig 6, 622)** having a control program **(fig 6, 622 runs firmware para 0096)** and a radio for sending and receiving data **(fig 2, transceiver)**, wherein said control program is arranged to send association requests to access points according to a first data communications protocol using said radio and to provide data communications to and from a computer via at least one access point connected thereto **(para 0007, 802.11 communciation protocol is being utilized for communication between STA and AP; requests)**,

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the second protocol being used within Awater's invention, Bluetooth, is

comparable and may be made equivalent to **a modification** of the 802.11 protocol, as both protocols aim for wireless communication with a destination device, so thus have the same goal but modified ways of implementing their goals.

However, Awater does not specifically disclose wherein said control program includes an initiaing program whereby said data communication device receives initiation requests from a peripheral device and forms a permanent association therewith using this modified protocol.

Famolari discloses wherein said control program includes an initiaing program whereby said data communication device receives initiation requests from a peripheral device and forms a permanent association therewith using this modified protocol **(see abstract and see fig 2b, several inquiries and requests being communicated between between two devices).**

Furthermore it would have been obvious to one of the ordinary skill in the art at the time of the invention that the use of bluetooth technology allows the permanent association of two devices as long as they are within a certain proximity.

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the requests for communcation as disclosed by Famolari within the functions of bluetooth control device. The motivation for this combination is to ensure that both devices are capable of communicating using updated software and ensuring compatibility and proximity.

Claim 24 Awater discloses said control program is arranged to send said reassociation requests in response to a beam signal from said mobile unit after it fails to receive data communications signals from said mobile unit **(para 0009, where bluetooth uses the function of acknowledgements, wherein ACK and NACK are known in the art to be applied as a**

request and response procedure; furthermore para 0054 discloses a sniffer for detection, where an appropriate form of sniffing would involve determining a failure to receive data or polling).

Response to Arguments

5. In response to the arguments filed by the applicant on September 19, 2007

(a) The applicant argued with respect to claims 1, 2-4,6, 7that the cited art does not disclose a single radio being used to operate in both said first WLAN mode and said second persinal area communications mode.

The amended limitation is now addressed, wherein Awater discloses a combined IEEE 802.11/Bluetooth transceiver, see fig 2, where element 200 is equivalent to said radio transmitter and receiver. Awater teaches a combined transceiver as shown in fig 2, as opposed to the multiple transceivers as disclosed within the applicants arguments.

(b) The applicant argued with respect to claim 8, 9-17 that the cited art does not show wherein said first control program can communicate directly with said at least one peripheral device.

The examiner believes that the applicant has interpreted the cited portions of Awater incorrectly. Awater discloses within a mobile device, a combined transeiver for 802.11 and bluetooth use. Awater goes on to describe when a mobile node is in bluetooth mode, the mobile is able to connect to another device via one universal radio link, where that radio link may be to a peripheral interface (para 0008, the on radio link indicates a direct link).

(c) The applicant argued with respect to claim 21-24 and 18, that the cited art does not disclose a permanent association between the communication device and mobile unit.

The examiner maintains that Awater discloses a permanent association interpreted in its broadest sense according to the rejection of claim 21. The applicant pulls citations from the specification of the present invention to support the arguments, however the claim is interpreted in light of the specification, where an association is defined as to connect or bring into relation. Awater and the rejection of claim 21 show that the bluetooth communication allows the connection of two devices, where that connection is equivalent to an association according to the broad interpretation, and furthermore, that association is permanent for the life of the connection.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571)272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Grey
Examiner
Art Unit 2616

C. Grey
Nov 29, 2007

DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600